

Comparisons of Job Characteristics

Focus Occupation: Industrial Engineers (17-2112)

Associated Occupation: First-Line Supervisors of Production and Operating Workers (51-1011)

Compare Knowledge

Compare Skills

Compare Abilities

Compare Detailed Work Activities

Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 78

Focus Occupation: Industrial Engineers (17-2112)

Associated Occupation: First-Line Supervisors of Production and Operating Workers (51-1011)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Production and Processing	6.0	17.4	17.4	0	Current knowledge level may be sufficient
Administration and Management	8.4	14.0	11.4	<	Expanded education and/or training may be required
Education and Training	9.2	11.1	12.4	>	Current knowledge level is likely sufficient
Mechanical	6.8	10.9	15.6	>>	Current knowledge level is likely more than sufficient
Mathematics	9.2	10.6	15.6	>>	Current knowledge level is likely more than sufficient
Personnel and Human Resources	5.6	10.2	5.1	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 79

Focus Occupation: Industrial Engineers (17-2112)

Associated Occupation: First-Line Supervisors of Production and Operating Workers (51-1011)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Time Management	8.9	12.6	9.8	<<	Extensive development of skills in this area may be required
Coordination	9.1	12.0	9.8	<	A higher skill level may be required
Management of Personnel Resources	6.9	11.8	8.4	<<	Extensive development of skills in this area may be required
Negotiation	6.8	9.8	7.3	<<	Extensive development of skills in this area may be required

Management of Material Resources	3.7	5.8	7.2	>	Skill level is likely sufficient
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The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities	Similarity of Focus Occupation to Associated Occupation: 94
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Focus Occupation: Industrial Engineers (17-2112) Associated Occupation: First-Line Supervisors of Production and Operating Workers (51-1011)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Oral Expression	12.4	14.0	14.5	0	Current ability level may be sufficient
Oral Comprehension	12.5	13.3	14.6	0	Current ability level may be sufficient
Written Comprehension	11.0	12.2	14.6	>	Current ability level is likely sufficient
Problem Sensitivity	11.1	12.1	13.6	>	Current ability level is likely sufficient
Deductive Reasoning	10.6	11.4	12.5	0	Current ability level may be sufficient
Speech Clarity	10.2	11.0	9.6	<	Some improvement in abilities may be required
Written Expression	9.8	11.0	14.1	>>	Current ability level is likely more than sufficient
Inductive Reasoning	10.2	10.7	12.8	>	Current ability level is likely sufficient
Originality	7.6	9.7	9.7	0	Current ability level may be sufficient
Fluency of Ideas	7.6	9.1	9.7	0	Current ability level may be sufficient
Perceptual Speed	7.4	8.4	7.4	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common	Similarity of Focus Occupation to Associated Occupation: 77
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Focus Occupation: Industrial Engineers (17-2112) Associated Occupation: First-Line Supervisors of Production and Operating Workers (51-1011)	
Work Activities	Exclusivity of Activity
Assign work to staff or employees	30
Communicate technical information	4
Coordinate production materials, activities or processes	81
Determine factors affecting production processes	84
Estimate materials or labor requirements	61
Read blueprints	10
Read technical drawings	7

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 75

Focus Occupation: Industrial Engineers (17-2112)

Associated Occupation: First-Line Supervisors of Production and Operating Workers (51-1011)

Tools and Technologies	Exclusivity
Business function specific software	1
Computer printers	2
Computers	1
Content authoring and editing software	1

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.